

Application No.: 10/802,205  
Final Office Action dated: September 25, 2007  
Advisory Action dated: January 28, 2008  
Response to Final with RCE dated: February 27, 2008

### **REMARKS**

Claims 1-24 are pending and remain for consideration.

Claims 1-3 and 13-15 are rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Miyazaki (US Patent No. 5,463,197) in view of Nakamura (US Patent No. 6,566,770). The rejection is traversed and reconsideration is respectfully requested.

Claims 1-3 and 13-15 are rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Miyazaki (US Patent No. 5,463,197) in view of Schmidt et al. (WO 03/015974). The rejection is traversed and reconsideration is respectfully requested.

Claims 4-6 and 16-18 are rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Miyazaki (US Patent No. 5,463,197) in view of Nakamura (US Patent No. 6,566,770) as applied to claim 1 above and further in view of Sugimoto et al. (US Patent No. 4,485,957) The rejection is traversed and reconsideration is respectfully requested.

Claims 4-6 and 16-18 are rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Miyazaki (US Patent No. 5,463,197) in view of Schmidt et al. (WO 03/015974) as applied to claim 1 above and further in view of Sugimoto et al. (US Patent No. 4,485,957) The rejection is traversed and reconsideration is respectfully requested.

Claims 7-12 and 19-24 are rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Miyazaki (US Patent No. 5,463,197) in view of Nakamura (US Patent No. 6,566,770) as applied to claim 1 above and further in view of Behler et al. (US Pub. No. 2002/0093130). The rejection is traversed and reconsideration is respectfully requested.

Claims 7-12 and 19-24 are rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Miyazaki (US Patent No. 5,463,197) in view of Schmidt et al. (WO 03/015974) as applied to claim 1 above and further in view of Behler et al. (US Pub.

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No. 2002/0093130). The rejection is traversed and reconsideration is respectfully requested.

Reconsideration of the above-identified claim rejections is respectfully requested in view of the following remarks. This Response incorporates by reference the remarks set forth in the Response to Office Action dated July 9, 2007, and therefore such remarks will not be repeated herein. The remarks in this Response are to address the Examiner's comments set forth in section #9 of the Office Action dated September 25, 2007.

In the Response to Office Action filed on July 9, 2007 the Applicants pointed out that Miyazaki does not mention the term "bondhead". Applicants maintain that this is true and correct. Miyazaki's disclosure is directed to a ball forming apparatus which is only a small part of a wire bonder. Although the wire bonder of Miyazaki has a bondhead, Miyazaki is silent as to the nature and operation of the bondhead. Figures 6 and 7 of Miyazaki do not disclose the electrical circuitry for controlling the motion of the bondhead. These figures show electrical circuitry which is needed for melting the wire protruding out of the capillary into a ball. Applicants therefore maintain that Miyazaki does not disclose and describe a power module for the operation of the bondhead.

Claim 1 of the present application recites the feature "*...the at least one emergency switch being configured for producing upon activation a signal for causing the control program to complete a current bond cycle and then suspend the further wiring and for starting the timer, the timer being configured for opening the power switch after a predetermined period of time has elapsed, the predetermined period being sufficient to complete the current bond cycle.*" There is no prior art that discloses the feature that the at least one emergency switch be configured for producing upon activation a signal for causing the control program to complete the current bond cycle and then suspend the further wiring. A bond cycle comprises securing the wire to a first

connection point, then feeding a predetermined length of the wire out of the capillary, forming the wire into a loop, securing a second piece of the wire to a second connection point and tearing the wire. When the wire is formed into a loop, the bondhead is accelerated and decelerated many times depending on the kind of loop. Completing the current bond cycle therefore means that the bondhead may be accelerated and decelerated one or more times before its motion is finished. In contrast to this, Nakamura discloses applying immediate braking control to a member being driven. Therefore Nakamura teaches to decelerate the member as soon as possible in order to avoid damage. Neither Nakamura nor any other of the cited prior art references taken either alone or in combination with Miyazaki teaches continuing with the normal operation until a certain task has been finished. In the present case this task is to complete the current bond cycle, as is recited in claim 1 and incorporated by reference in dependent claims 2-24.

In the Advisory Action dated January 28, 2008, the Examiner justifies the final rejection by asserting on the last three lines of the last sheet that the feature “that the bondhead may be accelerated and decelerated one or more times before its motion is finished” is not included as a limitation in claim 1. This is true in one sense and not true in another sense. It is true in that claim 1 does not contain a limitation with these exact words. It is not true in that claim 1 contains the equivalent limitation “the at least one emergency switch being configured for producing upon activation a signal for causing the control program to complete a current bond cycle and then suspend the further wiring.” What movements the bondhead has to carry out and how many accelerations and decelerations are necessary to complete the current bond cycle depends on the point in time when the emergency switch creates the signal and on the movement path of the bondhead that is programmed to form the wire loop.

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In view of the foregoing, it is respectfully submitted that claims 1-24 are not obvious in view of the cited references, and therefore are in condition for allowance. All issues raised by the Examiner having been addressed, an early action to that effect is earnestly solicited.

Applicants hereby petition for a one-month extension of time to file this Response and accompanying RCE. Please charge our Deposit Account No. 13-0235 the amount of \$930.00 to cover the cost of the extension fee (\$120.00) and the cost of filing the accompanying RCE (\$810.00). No additional fees or deficiencies in fees are believed to be owed. However, authorization is hereby given to charge our Deposit Account No. 13-0235 in the event any such fees are owed.

Respectfully submitted,

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